

1. (Twice Amended) A liquid discharge head comprising a heat generating element contacted with and between a pair of electrodes for generating thermal energy which is used for discharging liquid from a discharge port, and a protective coating provided on said heat generating element to protect said heat generating element,

wherein said protective coating has a first region with a substantially uniform thickness along a direction connecting said pair of electrodes and a second region with a substantially uniform thickness along the direction, wherein said second region is thinner than said first region stepwise, and wherein the volume of a liquid droplet discharged from said discharge port is changed by changing electric energy applied to said heat generating element.

11. (Twice Amended) A liquid discharge head comprising a heat generating element contacted with and between a pair of electrodes for generating thermal energy which is used for discharging liquid from a discharge port, a protective coating provided on said heat generating element to protect said heat generating element and a moving member provided facing said heat generating element and having a free end which is displaced in accordance with generation of a bubble due to said thermal energy,

wherein said protective coating has a first region with a substantially uniform thickness along a direction connecting said pair of electrodes and a second region with a substantially uniform thickness along the direction, wherein said second region is thinner than said first region stepwise, and wherein the volume of a liquid droplet discharged from said discharge port is changed by changing electric energy applied to said heat generating element.

22. (Twice Amended) A liquid discharge method using a liquid

discharge head having a heat generating element contacted with and between a pair of electrodes for generating thermal energy which is used for discharging liquid from a discharge port, and a protective coating for protecting the heat generating element, provided on the heat generating element, said protective coating having a first region with a substantially uniform thickness along a direction connecting the pair of electrodes and a second region with a substantially uniform thickness along the direction, wherein said second region is thinner than the first region stepwise,

wherein a size of a bubble generated on the heat generating element is changed by changing electric energy applied to the heat generating element to generate a bubble on both the first region and the second region or on only the second region, and wherein the volume of a liquid droplet discharged from the discharge port is changed.

23. (Twice Amended) A liquid discharge method using a liquid

discharge head having a heat generating element contacted with and between a pair of electrodes for generating thermal energy which is used for discharging liquid from a discharge port, a protective coating for protecting the heat generating element, provided on the heat generating element and a moving member provided facing the heat generating element and having a free end which is displaced in accordance with generation of a bubble due to the thermal energy, the protective coating having a first region with a substantially uniform thickness along a direction connecting the pair of electrodes and a second region with a substantially uniform thickness along the direction, wherein said second region is thinner than the first region stepwise,